

WE CLAIM AS OUR INVENTION:

1. A networked expert system for automatic evaluation and quality control of medical point of care laboratory measurement data, comprising:

a point of care measuring device disposed at a point of care which obtains point of care laboratory measurement data;

a central expert system, disposed remote from said location of point of care, and

a data link, selected from the group consisting of a data line and a data network, connecting said central expert system to said point of care measuring device; and

said central expert system being accessible by a treating physician via said data link to function as a virtual laboratory data collection and diagnostic system for acting on said point of care laboratory measurement data to make an evaluation available to said treating physician based on said point of care laboratory measurement data.

2. A networked expert system as claimed in claim 1 wherein said point of care measuring device is disposed at a facility of a physician.

3. A networked expert system as claimed in claim 1 wherein said expert system is connected online to a central laboratory for automatically reporting back a listing to said treating physician of secondary examinations available for acting on said point of care laboratory measurement data if an initial evaluation at said expert system of said point of care laboratory measurement data does not produce a definitive diagnosis.

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4. A networked expert system as claimed in claim 3 wherein the central laboratory reports the results of the secondary examinations to the expert system and the expert system re-evaluates the point of care laboratory measurement data by using the results of the secondary examinations.

5. A networked expert system as claimed in claim 3 wherein a request to the point of care is automatically made for providing a sample for the central laboratory.

6. A networked expert system as claimed in claim 1 further comprising a plurality of sub-systems forming said central expert system connected to each other via a data network using data encoding.

7. A networked expert system as claimed in claim 1 wherein said expert system includes a data bank containing up-to-date medical knowledge and patent data and acts on said point of care laboratory measurement data using said medical knowledge and said patient data.

8. A networked expert system as claimed in claim 6 wherein said central expert system includes means for limiting access to said up-to-date medical knowledge and patient data only to authorized persons.

9. A networked expert system as claimed in claim 7 further comprising, at said location of said treating physician, a chip card reader which requires insertion of a chip card of an authorized user in order to authorize access to said central expert system.

10. A networked expert system as claimed in claim 1 wherein said point of care measurement device comprises a container for obtaining a patient specimen having an electronically readable identifier thereon.

11. A networked expert system as claimed in claim 9 wherein said electronically readable identifier is a bar code.